II. Rejection under 35 U.S.C. § 112, second paragraph

Claim 24 has been rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention for the various reasons set forth on page 2 of the present Office Action.

In order to meet the requirements of 35 U.S.C. § 112, second paragraph, the claims must define the patentable subject matter with a reasonable degree of particularity and precision. M.P.E.P. § 2173.02. The Federal Circuit has decided that the definiteness of the claim language must be analyzed, not in a vacuum, but in light of the content of the application disclosure, the teachings of the prior art, and the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. M.P.E.P. § 2173.02.

The Examiner asserts that "'biotechnology' is a broad term which does not provide any metes and bounds that render the claim indefinite." *See* page 2 of the present Office Action. Applicants respectfully assert that a broad claim is not indefinite for the purposes of § 112, second paragraph, as long as the boundaries of the claim are capable of being understood. M.P.E.P. § 2173.04. Further, Hawley's Condensed Chemical Dictionary (Third Edition), at pages 141-142, under "biotechnology" states:

> "A definition prepared by a committee of British scientists in a report issued by the Organization for Economic Cooperation and Development (Paris) may be considered official and definitive. It states that biotechnology is 'application of scientific and engineering principles to the processing of any

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> organic or inorganic substance by biological agents to provide goods and services; the biological agents include a wide range of biological catalysts, particularly microorganisms, enzymes and animal and plant cells.' This involves commercial production of chemical compounds from either (1) renewable resources (biomass) or (2) nucleic acids (DNA). Examples of (1) are production of antibiotics, alcohols, single-cell proteins by fermentation, and synthetic bacteria by gene splicing."

Thus, one of ordinary skill in the art would recognize that, according to Claim 24, the at least one enzyme of laccase type may be chosen from, *inter alia*, laccases obtained by application of scientific and engineering principles to the processing of any organic or inorganic substance by biological agents. Applicants assert that there is nothing indefinite in such definition. Further, Applicants again assert that this claim language is merely broad and that breadth is not indefiniteness under § 112, second paragraph. M.P.E.P. § 2173.04. Accordingly, for at least the foregoing reasons, Applicants respectfully request the withdrawal of the rejection under § 112, second paragraph.

III. Rejection under 35 U.S.C. § 103(a)

Claims 23-63 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 97/19998 ("*Aaslyng*") in view of U.S. Patent No. 5,769,903 ("*Audousset*") for the reasons set forth on pages 2-4 of the present Office Action. Applicants respectfully traverse this rejection for the reasons set forth below.

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To establish a *prima facie* case of obviousness, an Examiner must meet three basic criteria. First, the Examiner must demonstrate that there is some suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of skill in the art, to modify a reference or combine reference teachings. Second, the Examiner must demonstrate that there was a reasonable expectation of success. Finally, the prior art reference(s) must also teach or suggest all the claim limitations. *See* M.P.E.P. § 2143. Furthermore, the teaching or suggestion to make the claimed combination must be found in the prior art, not in Applicants' disclosure. *See* In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

In the present case, the Examiner has failed to make a *prima facie* case of obviousness because at least the first two of the above criteria have not been met. Specifically, one of ordinary skill in the art would not have been motivated to include the basifying agent of *Audousset* in the compositions of *Aaslyng*, nor would there have been a reasonable expectation of success for such a modification.

Aaslyng fails to provide the motivation necessary to support a *prima facie* case of obviousness because *Aaslyng* does not teach or suggest the inclusion of or the need for any alkanizing agent, let alone the basifying agent of *Audousset*. The Examiner relies on *Audousset* to cure *Aaslyng*'s deficiencies, asserting that "one of ordinary skill in the art would have been motivated to modify primary reference of *Aaslyng et al.* by using alkaline compound in dyeing composition as described above to modify different

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color and shades in the dyeing." *See* pages 3-4 of the present Office Action. The Examiner then summarily concludes that "[s]uch modification would be obvious because one would expect that the use of alkaline compound would be similarly useful and applicable to the *Aaslyng et al* for dyeing hair." *Id.*

However, *Audousset* does not disclose the utility or the applicability of the basifying agents in combination with laccases. In fact, *Audousset* does not even mention enzymes, let alone laccases. Thus, Applicants respectfully disagree with the Examiner's statement that "one would expect that the use of alkaline compound would be similarly useful and applicable to the *Aaslyng et al* for dyeing hair." In the present case, the Examiner has not pointed to any actual evidence in the cited references that would have led one of ordinary skill in the art to expect such usefulness or applicability as suggested by the Examiner. As stated by the Federal Circuit, evidence of motivation to combine or modify references must be clear and particular. *See* In re Dembiczak, 175 F.3d 994, 999 (Fed Cir. 1999). Broad conclusionary statements regarding the teachings of multiple references, standing alone, are not "evidence". *Id.* In the outstanding Office Action, the Examiner has relied on an unsupported conclusionary statement but no "clear and particular" evidence has been offered which would provide evidence of a suggestion, teaching, or motivation to combine the cited references. Without such clear and particular evidence, the Examiner has failed to establish a *prima facie* case of obviousness.

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Finally, one of skill in the art would not have had the requisite reasonable expectation of success for the proposed modification. *Audousset* is silent with respect to laccases (and consequently silent with respect to the usefulness and applicability of the basifying agents in compositions comprising laccases). *Aaslyng* is silent with respect to basifying agents (and consequently silent with respect to the effect, if any, of basifying agents on the enzymatic activity of laccases). Therefore, one of skill in the art would not have had the requisite reasonable expectation of success for making the modification proposed by the Examiner. Accordingly, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness for this additional reason.

Therefore, one of ordinary skill in the art would not have been motivated to modify *Aaslyng* by *Audousset*, nor would there have been a reasonable expectation of success. Consequently, Applicants respectfully request withdrawal of this rejection.

III. Conclusion

In view of the foregoing remarks, Applicants respectfully request the reconsideration of the pending claims and reexamination of the application. The timely allowance of the pending claims is respectfully requested.

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Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: September 28, 2001

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